GRX1200 Series

Getting Started

Version 1.0
English

Leica Geosystems

Introduction

Purchase

Congratulations on the purchase of a GRX1200 Series instrument.

To use the product in a permitted manner, please refer to the detailed safety directions in the User Manual.

Product identification

The model and the serial number of your product are indicated on the type plate.
Enter the model and serial number in your manual and always refer to this information when you need to contact your agency or Leica Geosystems authorized service workshop.

Type: _____

Serial No.: _____

Software-Version: _____

Symbols

The symbols used in this manual have the following meanings:

Type	Description
	Important paragraphs which must be adhered to in practice as they enable the product to be used in a technically correct and efficient manner.

Trademarks

- Windows is a registered trademark of Microsoft Corporation
- CompactFlash and CF are trademarks of SanDisk Corporation
- Bluetooth is a registered trademark of Bluetooth SIG, Inc

All other trademarks are the property of their respective owners.

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1 How to Use this Manual

It is recommended to set up the product while reading through this manual.

Path

Control Panel/Phone and Modem Options/Modems stands for this working sequence: From a menu select **Control Panel**, then **Phone and Modem Options** and then **Modems**.

Fields, options and buttons

Fields, options and buttons are printed in bold, for example:

Field: **Maximum Port Speed**
Option: **115200**
Button: **OK**

Index

The index is at the back of the manual.

Validity of this manual

This manual applies to all GRX1200 Series instruments. Differences between the various models are marked and described.

Available documentation

Name of documentation	Description
GPS1200 User Manual	Provides an overview of the system together with technical data and safety directions.

Name of documentation	Description
GPS1200 Technical Reference Manual	Overall comprehensive guide to the system and program functions. Included are detailed descriptions of special software/hardware settings and software/hardware functions intended for technical specialists.

Name of documentation	Description
Equipment List For GPS Networks and Reference Stations	Describes items and setup of permanent GPS reference stations.
GPS Reference Stations and Networks - An introductory guide	Explains priciples of GPS reference stations.

Format of the documentation

The GPS1200 CD contains the entire documentation in electronic format. All manuals are also available in printed form except for the GPS1200 Technical Reference Manual.

2 Overview

Description

The GRX1200 Series Installation Guide

- explains the configuration steps necessary to bring a GRX1200 Series receiver into service.
- explains the different configuration and operation options of GRX1200 Series receivers as requirements may vary from installation to installation.
- gives recommendations for standard setup scenarios.

Tools for configuration and operation

GRX1200 Series receivers can be configured and operated using

- a web browser plus a web interface. Refer to paragraph "Terminology" for and explanation of the terms.
- LEICA GPS Spider.

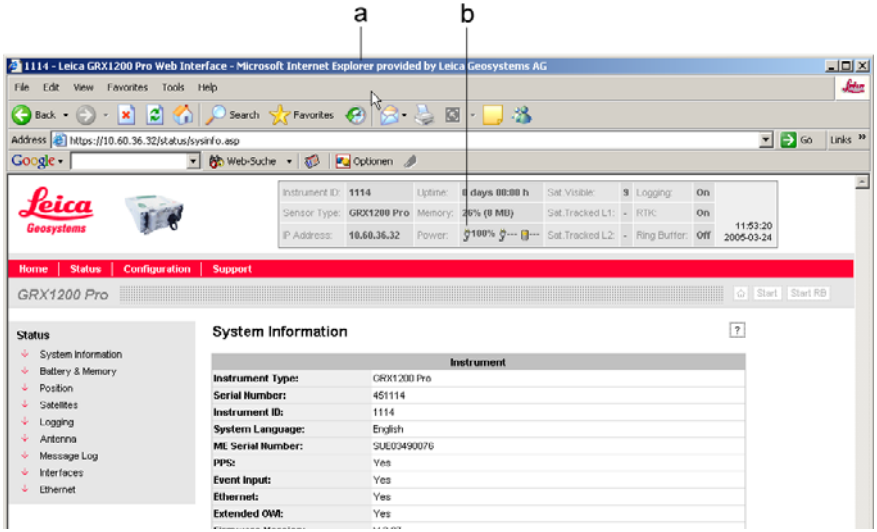
The differences are:

Type	Web interface	LEICA GPS Spider
Firmware version	v2.1 or higher	Any
Connection between computer and receiver	Ethernet OR Serial cables	Any combination of • Serial connection • Modem connection • Ethernet connection

Type	Web interface	LEICA GPS Spider
Use	• Configuration of one receiver • Operation of one receiver	Simultaneous configuration, operation and communication with one or many receivers.
Features	Everything needed for receiver setup, for example: • To provide conventional RTK corrections through one or more of its ports. • To log raw data onto the CompactFlash card. • To stream GPS data to other users.	More advanced features than web interface, for example: • To transfer raw data automatically from the receiver to a central data storage. • To manage a whole network of reference stations. • To supply network RTK corrections.

Terminology

Term	Description
Web browser	For example Internet Explorer. Refer to the diagram below.
Interface	The procedures, codes and protocols that enable two entities to interact for an exchange of data.
Web interface	Kind of an entry form to define receiver relevant settings. Runs in a web browser. Refer to the diagram below.



a) Web browser
b) Web interface

Requirements

- When using the web browser, firmware v2.1 or higher must be loaded on the GRX1200 Series receiver.
- The receiver must be connected to a power supply.
- For a complete configuration into service, the reference station antenna must be set up and connected.

- CompactFlash card, depending on the configuration method. Refer to the GPS1200 User Manual and the Equipment List For GPS Networks and Reference Stations for information on how to set up reference station hardware.

2 Configuration

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2.1 Configuration for Connecting with Web Browser or LEICA GPS Spider

In this chapter

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2.1.1 Overview

Configuration methods

The basic port and address settings of a receiver for connecting with web browser or LEICA GPS Spider

- are pre-configured with default settings.
- can be configured using the Startup Configurator.

Type	Default settings	Startup Configurator
Format	Pre-configured in receiver	Editable ASCII text file to be put on CompactFlash card
Use	• To connect from LEICA GPS Spider to the receiver. • To configure receiver from the web interface over Ethernet.	• To change the default settings. • To query information from the receiver.

Next step

IF information is required on	THEN
default settings	Refer to "2.1.2 Default settings".
Startup Configurator	Refer to "2.1.3 Startup Configurator".

2.1.2 Default settings

Serial ports

Type	Setting
Baud rate	115200
Parity	None
Data bits	8
Stop bit	1
Flow control	None
PPP on port RX	Off

Ethernet

These settings are applicable to GRX1200 Pro.

Type	Setting
IP address	192.168.0.3
Network mask	255.255.255.0
Gateway	1.1.1.1
IP Port numbers	NET1: 5001 NET2: 5002 NET3: 5003
Access ranges	All open

PPP

These settings are valid for all GRX1200 Series receivers.

Type	Setting
IP address for PPP	192.168.1.3, fixed

Interfaces

Type	Setting
Serial ports	Remote interface
NET ports	Remote Interface

Web interface

Type	Setting
User name	Admin
Password	12345678

Super Administrator

Type	Setting
User name	PUK
Password	The **P**ersonal **U**nbloc**K**ing code as generated by Leica Geosystems.

FTP server

Type	Setting
User name	Admin
Password	12345678

2.1.3 Startup Configurator

Description

The Startup Configurator is an ASCII file-based

- configuration
- extraction

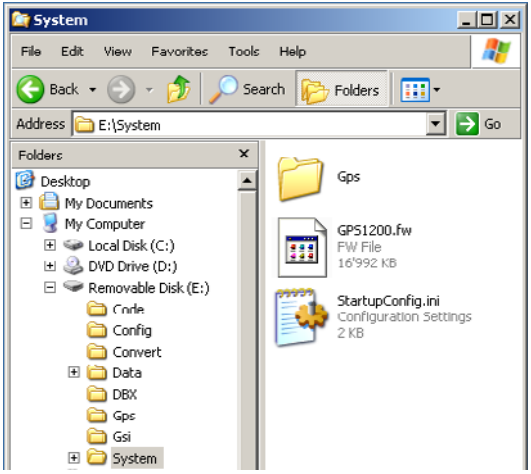
of the basic port and address settings of a GRX1200 Series receiver.

Type	Configuration	Extraction
Use	To set settings.	To query current settings.
File name	StartupConfig.ini	GetConfig.ini
Directory on CompactFlash card	\SYSTEM	\SYSTEM
Procedure	• GRX1200 Series receiver is turned on. • While powering up, it looks for the file on the CompactFlash-card. • It reads the contents. • It uses the settings once the startup is finished.	• GRX1200 Series receiver is turned on. • While powering up, it writes its current settings to the file.
Example file	On GPS1200 CD	On GPS1200 CD

Type	Configuration	Extraction
Explanation of file contents	Refer to paragraph "File contents for Startup-Config.ini/GetConfig.ini".	Refer to paragraph "File contents for Startup-Config.ini/GetConfig.ini".

Configure port and address settings step-by-step

Step	Description
1.	Copy the StartupConfig.ini file from a GPS1200 CD to a PC.
2.	Modify the StartupConfig.ini file as required using any text editor on a PC.
3.	Copy the StartupConfig.ini file to the \SYSTEM directory of the CompactFlash card.
	Check the contents of the CompactFlash card. It should then look like this:

Step	Description
	
4.	Remove the CompactFlash card from the PC.
5.	Make sure the receiver is switched off.
6.	Insert the CompactFlash card into the CompactFlash card compartment of the receiver.
7.	Turn the receiver on.
☞	The receiver reads the file contents and applies the settings.
☞	Once the settings have been applied successfully, the StartupConfig.ini file is deleted.

Query port and address settings step-by-step

Step	Description
1.	Copy the GetConfig.ini file from a GPS1200 CD to a PC. OR Create an empty ASCII file called GetConfig.ini on a PC. The content of the file does not matter, but the filename has to be exactly GetConfig.ini.
2.	Copy the GetConfig.ini file to the \SYSTEM directory of the CompactFlash card.
3.	Remove the CompactFlash card from the PC.
4.	Make sure the receiver is switched off.
5.	Insert the CompactFlash card into the CompactFlash card compartment of the receiver.
6.	Turn your receiver on.
☞	The receiver writes its current settings to the file.
7.	Wait until the red LED beside the CompactFlash card compartment has stopped flashing.
8.	Remove the CompactFlash card.
9.	Insert the CompactFlash card into a PC or card reader.
10.	Read or modify the contents of the GetConfig.ini file in the \SYSTEM directory.
☞	The the GetConfig.ini file looks exactly the same as the StartupConfig.ini file, only the name is different.
☞	Rename the GetConfig.ini file to StartupConfig.ini in case it is to be used for receiver configuration in fututre.

File contents for StartupConfig.ini/GetConfig.ini

This is an example of the contents of a configuration file. Example files can be found on the GPS1200 CD in Gps1200\GPS1200_SampleData\Startup Configurator_(GRX1200)\.

Example from file	Explanation
The format of all lines in the StartupConfig.ini file has to be exactly as shown, except for comment lines starting with #.	
######################## # Author: Leica Geosystems AG ########################	**Header** • Standard header when querying settings using GetConfig.ini. • Header can be edited and expanded. • Can be used to keep track of the author, version or the history of the configuration files. • All lines starting with # are comments and are ignored by the receiver when it reads the file.
# Sensor ######################## VersionNr:2.10,= SerialNr:451114,=	**Sensor** • Firmware version and serial number of the receiver. • In a StartupConfig.ini file, =, > and < can be used to configure conditional usage of the settings. • For example, to tell the receiver to only use of the StartupConfig.ini if the firmware version is higher than v2.1 use VersionNr:2.10,>

Example from file	Explanation
# PPPonRxPort ########## PPPonRxPort:No PPPonRxPort:Yes	**PPPonRxPort** • For receivers without Ethernet connection, such as GRX1200 Lite and GRX1200 Classic, port RX can be used to run the web configuration over a serial cable. Refer to "2.3 Configuring and Monitoring a GRX1200 Series Reference Station with Web Interface". • If PPPonRxPort is set like this, the receiver is prepared for web interface connections. RX1200 cannot be connected to the port so long as PPP is enabled. In that case, use the clip-on-contacts for the RX1200.
# ComPort ########## ComPort:1,115200,None,8,1,None ComPort:2,57600,None,8,1,RTS/CTS ComPort:3,115200,None,8,1,None ComPort:Rx,115200,None,8,1,None	**ComPort** • Settings for port number, baud rate, parity, data bit, stop bit and flow control for each ComPort. • When querying the ComPort settings, any devices configured for that port is listed. • It is not possible to set devices using the Startup-Config.ini.
# MAC-Address ########## MAC-Address:00:c0:1b:05:3f:73	**MAC address** • **M**edia **A**ccess **C**ontrol address. • Applicable for the GRX1200 Pro.

Example from file	Explanation
	• A hardware address that uniquely identifies each receiver's network adaptor. • The MAC address is often required by network administrators when assigning a static IP address to a receiver within a network. ☞ The MAC address cannot be set, but only queried.
# Ethernet ########## Ethernet:10.60.36.32,255.255.254.0,10.60.36.5	**Ethernet** This setting is applicable for GRX1200 Pro. • The receiver's IP address, subnet mask and gateway settings • Defining the address, the size of the subnet and the gateway to contact for connections outside the subnet. Ask your system administrator for these settings.
# EthernetPort ##########	**EthernetPort** This setting is applicable for GRX1200 Pro. Features of the Ethernet connection of GRX1200 Pro: • three logical IP (=NET) ports, which can be used for receiver control over the remote interface, streaming of real-time corrections, GPS raw and other data. • FTP and web interface (http) access.

Example from file	Explanation
EthernetPort: NET1,5001,Server,1.1.1.1,254.254.254.254,1.1.1.1,254.254.254.254,1.1.1.1,254.254.254.254 Ethernet-Port:NET2,5002,Server,10.60.36.33,10.60.36.33,10.60.36.33,10.60.36.33,10.60.36.33	Settings per line for each NET port: • NET port number, IP port number, server mode, access range 1 from, access range 1 to, access range 2 from, access range 2 to, access range 3 from, access range 3 to OR
EthernetPort: NET3,8001,Client,10.60.36.251	• NET port number, server IP port number, client mode, server IP address. Description of settings • IP port number Forms, together with the IP address, the unique address of the port within the network. Ask the system administrator for this setting. • Server/client mode **Server**: The port is waiting for clients to connect. Clients can be for example LEICA GPS Spider on the remote interface, or RTK rovers on the real-time interface. **Client**: Receiver is establishing connections itself, for example to a NTRIPCaster.

Example from file	Explanation
	• Access ranges Applicable in server mode. The access to NET ports can be restricted using three access ranges per port. In the example given above, NET2 can only be access by the client with the address 10.60.36.33. • Server IP address, server IP port number Applicable in client mode. In the example given above, NET3 is configured to connect to 10.60.36.251, port 8001. More details for the Ethernet related settings can be found in the web interface Online Help, as well as in the GPS1200 Technical Reference Manual.

- When using the Startup Configurator files, make sure that either StartupConfig.ini or GetConfig.ini is in the root directory of the CompactFlash card. In case both files are available, the receiver will only take GetConfig.ini into account, and ignore the settings in StartupConfig.ini.
- The format of all lines in the StartupConfig.ini file has to be exactly as shown, except for comment lines starting with #.
- In case an invalid entry is found in a StartupConfig.ini file, the receiver will create an error log file StartupConfig.err. This file contains information on why an entry was detected as invalid. Valid settings will be applied, regardless of invalid ones.

2.2 Pre-Configuration of the Receiver for Connections from LEICA GPS Spider

Requirements

- The reference station hardware is prepared. Refer to the GPS1200 User Manual and the Equipment List For GPS Networks and Reference Stations for information on how to set up reference station hardware.
- The receiver is powered.
- The antenna is connected.
- Depending on the configuration method, CompactFlash card must be inserted.
- The reference station software is correctly installed.
- The PC running LEICA GPS Spider is connected with the receiver.

Remote interface

The remote interface

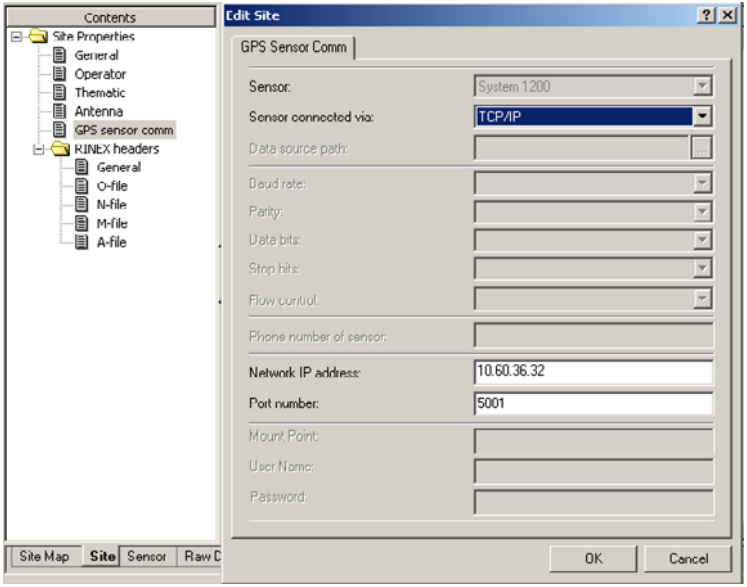
- is a two-way communication interface.
- is prepared to receive, and reply to, commands according to the Leica OWI standard.
- has, per default, all serial and NET ports on a GRX1200 Series receiver assigned to it.
- is the communication interface between LEICA GPS Spider and the receiver.
- is used by third-party reference station software, which is capable of interfacing with Leica GPS1200 receivers. Accordingly all explanations in this chapter can also applied in the pre-configuration of connections from these software packages.

Pre-configuration

GRX1200 Series receivers can be pre-configured in one of the following three ways.

Type	Description
Default values	• GRX1200 Series receivers are pre-configured with default settings. Refer to "2.1.2 Default settings" for information on the settings.

Type	Description
	• For connections over the serial ports, the default values will normally be sufficient. **Configuration** No further configuration is required. **Next step** Refer to paragraph "Connect from LEICA GPS Spider" for information on how to establish a connection from within LEICA GPS Spider.
Startup Configurator	• To configure special port settings different to default settings. • To configure Ethernet settings different to default settings. • The receiver settings must match the settings specified in LEICA GPS Spider receiver configuration dialog:

Type	Description
	 **Configuration** Refer to "2.1.3 Startup Configurator" for information on how to use the Startup Configurator. **Next step** After the configuration has been done, the connection from within LEICA GPS Spider can be established. Refer to paragraph "Connect from LEICA GPS Spider" for information.

Type	Description
RX1200	• RX1200 can be useful if the receiver is to be pre-configured for modems that cannot be treated as standard RS232 serial devices. **Configuration** Define and assign the modem using RX1200. **Next step** After the configuration has been done, the connection from within LEICA GPS Spider can be established. Refer to paragraph "Connect from LEICA GPS Spider" for information.

Connect from LEICA GPS Spider

Click Connect in LEICA GPS Spider to establish communication.
LEICA GPS Spider will indicate the successful connection with a progess bar and a watch-view message.
Refer to the corresponding topic of the LEICA GPS Spider Online Help for information on how to troubleshoot receiver communication.

2.3 Configuring and Monitoring a GRX1200 Series Reference Station with Web Interface

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2.3.1 Overview

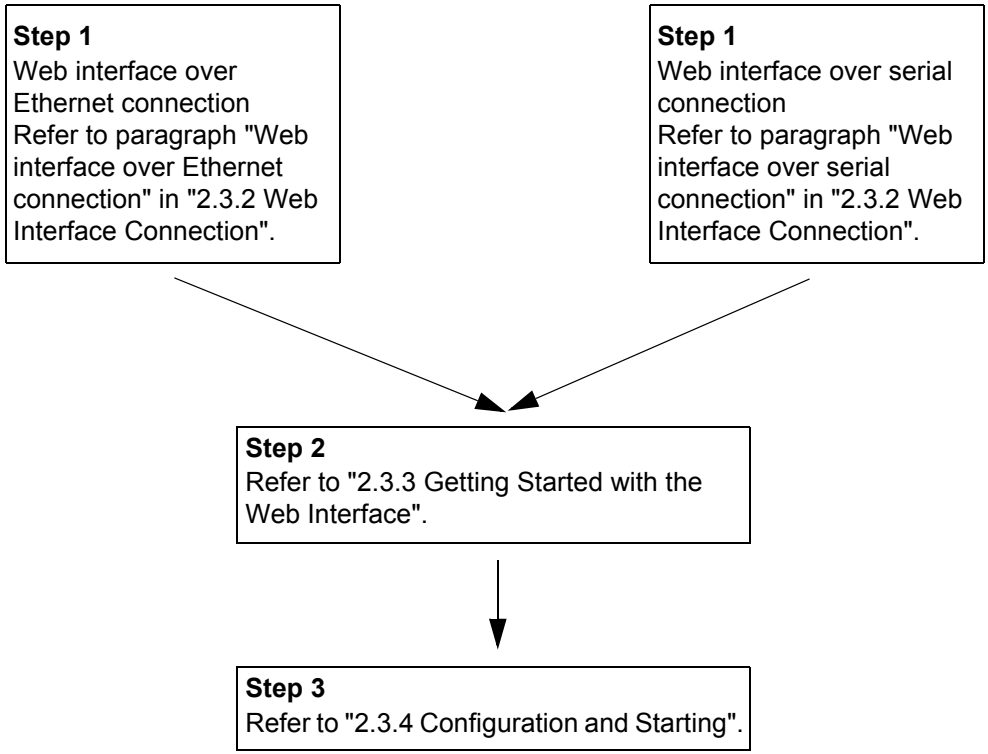
Requirements

- The reference station hardware is prepared. Refer to the GPS1200 User Manual and the Equipment List For GPS Networks and Reference Stations for information on how to set up reference station hardware.
- The receiver is powered.
- The antenna is connected.
- Depending on the configuration method, CompactFlash card must be inserted.
- For GRX1200 Pro with port NET for Ethernet connection, the PC running the web browser and the receiver must physically be connected to the same LAN/WAN.

  OR

  For GRX1200 Classic / GRX1200 Lite without port NET for Ethernet connection, the PC must physically be connected to the receiver port RX using a serial cable.

Procedure


Step 1
Web interface over Ethernet connection
Refer to paragraph "Web interface over Ethernet connection" in "2.3.2 Web Interface Connection".
Step 1
Web interface over serial connection
Refer to paragraph "Web interface over serial connection" in "2.3.2 Web Interface Connection".
Step 2
Refer to "2.3.3 Getting Started with the Web Interface".
Step 3
Refer to "2.3.4 Configuration and Starting".

2.3.2 Web Interface Connection

Next step

Depending on the type of receiver, the configuration of the web interface connection varies.

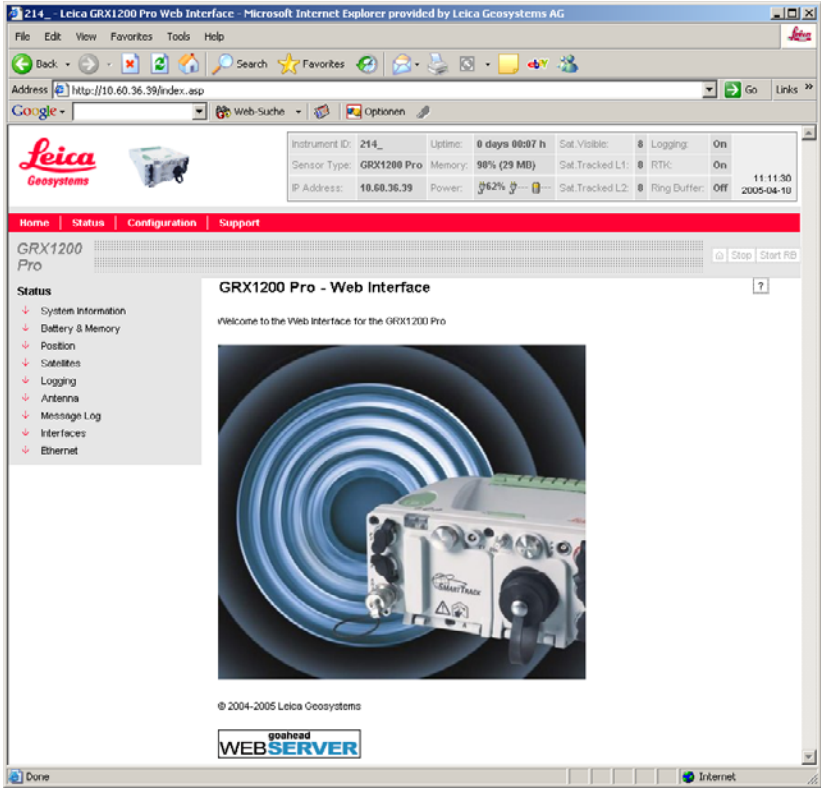
IF the receiver is a	THEN
GRX1200 Pro	refer to paragraph "Web interface over Ethernet connection".
GRX1200 Classic / GRX1200 Lite	refer to paragraph "Web interface over serial connection".

Web interface over Ethernet connection

Applicable for the GRX1200 Pro. A connection to the web interface is made using LAN and the port NET, the receiver's Ethernet port.

Step	Description
1.	Set • IP address • subnet mask • gateway on the receiver using the Startup Configurator. Refer to "2.1.3 Startup Configurator" for information.
2.	Open the web browser.
3.	Type in the IP address of the receiver into the address bar, for example http://10.60.36.39.
4.	Press **ENTER**.

Step	Description
☞	After a few seconds, the start page of the web interface comes up:



Step	Description
5.	Continue with "2.3.3 Getting Started with the Web Interface".

Web interface over serial connection

Applicable for the GRX1200 Classic / GRX1200 Lite. A connection to the web interface is made using a serial cable and **P**oint-to-**P**oint **P**rotocol.

The procedure of connecting to the web consists of four parts:

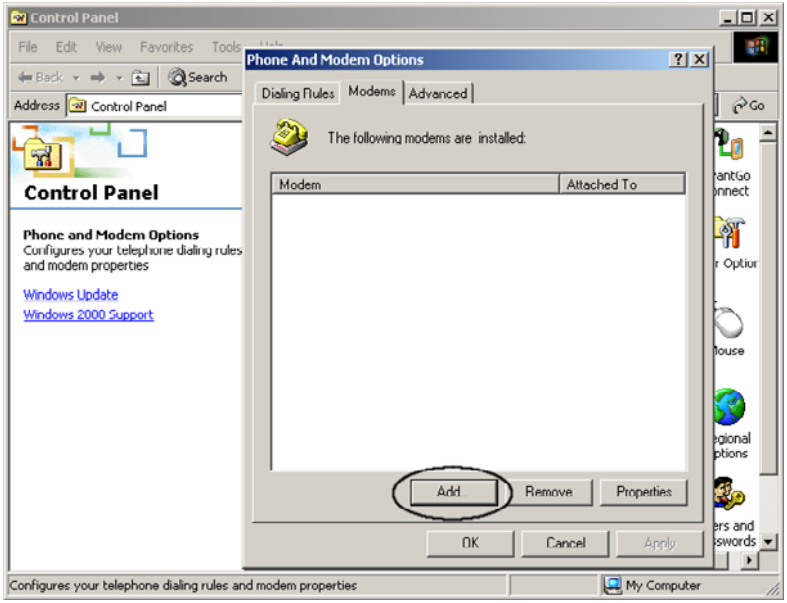
- Configure PPP on port RX of the receiver.
- Define a serial line modem device on the PC.
- Define a PPP network connection.
- Establish a PPP connection.

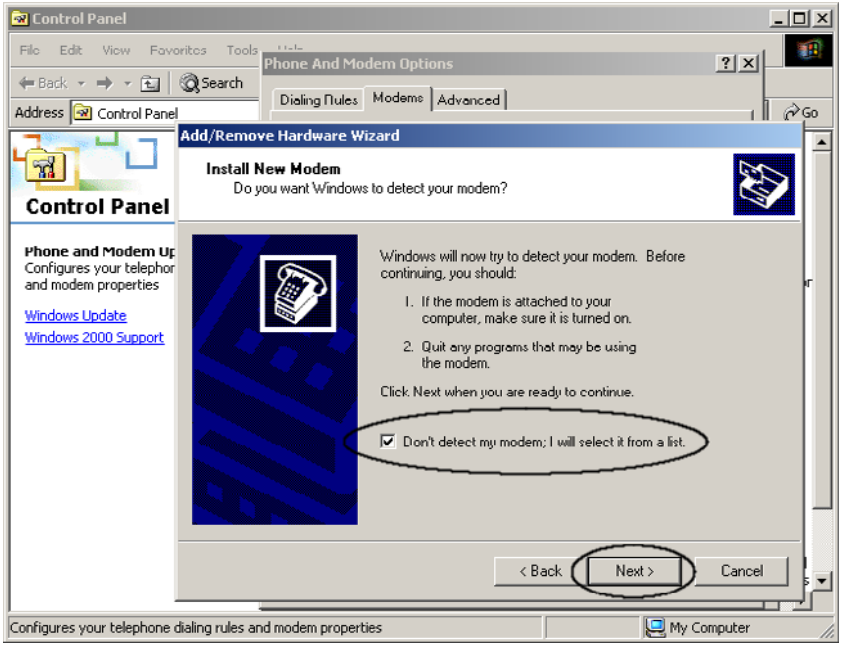
Each part is described below step-by-step. The description is made for Windows 2000. Windows XP configuration is basically the same, however some screens and description of settings may vary slightly.

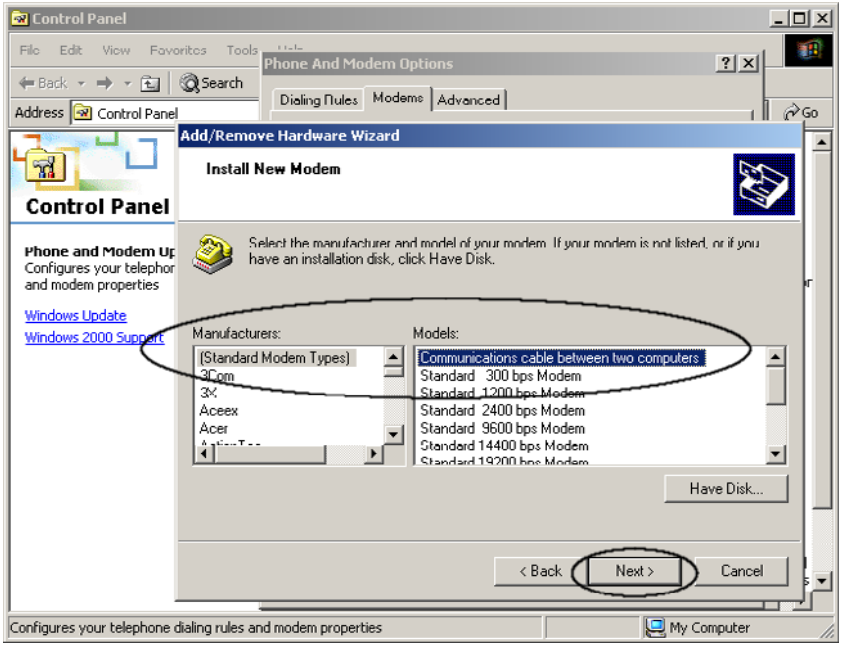
Configure PPP on port RX of the receiver

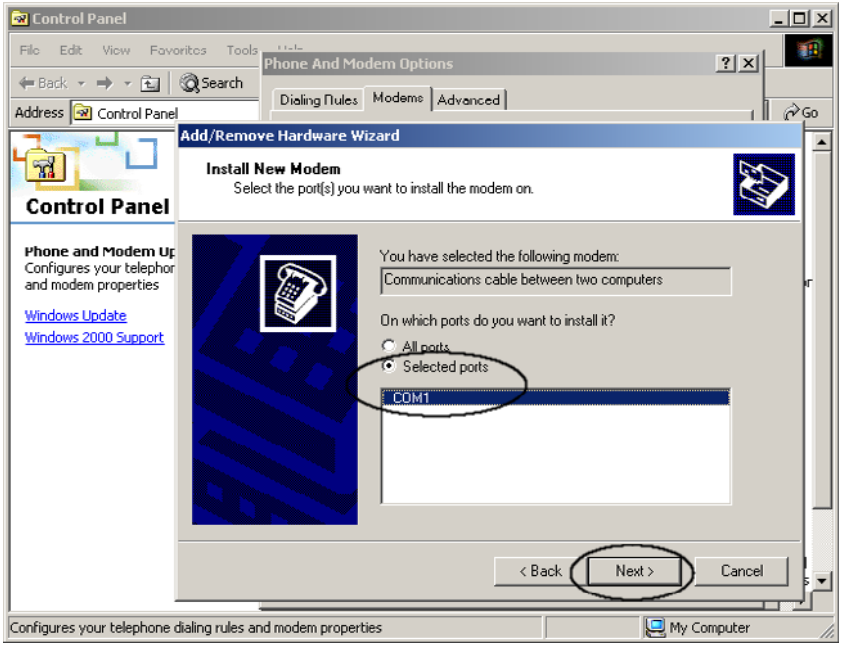
Step	Description
1.	Set **PPPonRxPort:Yes** using the Startup Configurator. Refer to "2.1.3 Startup Configurator".

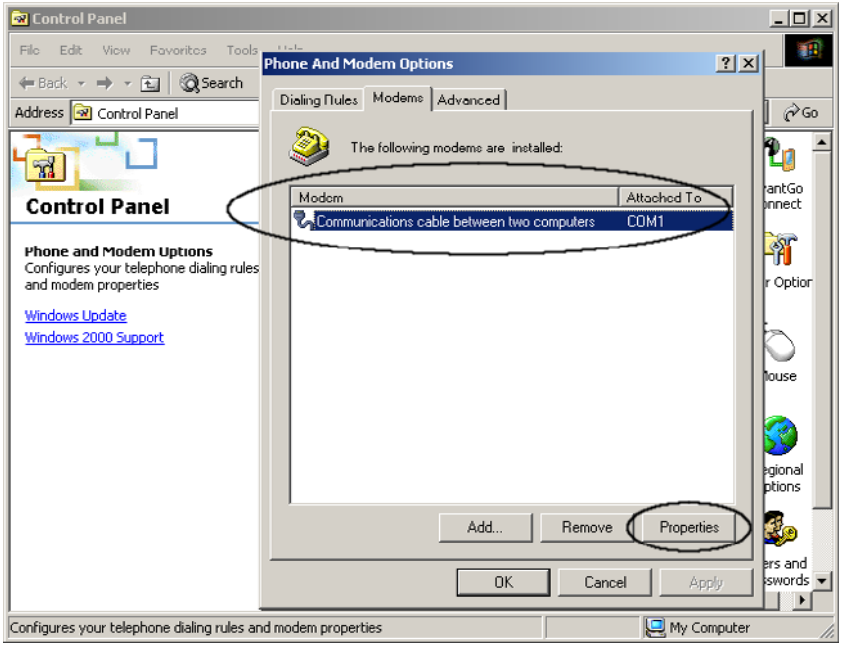
Define a serial line modem device on the PC step-by-step

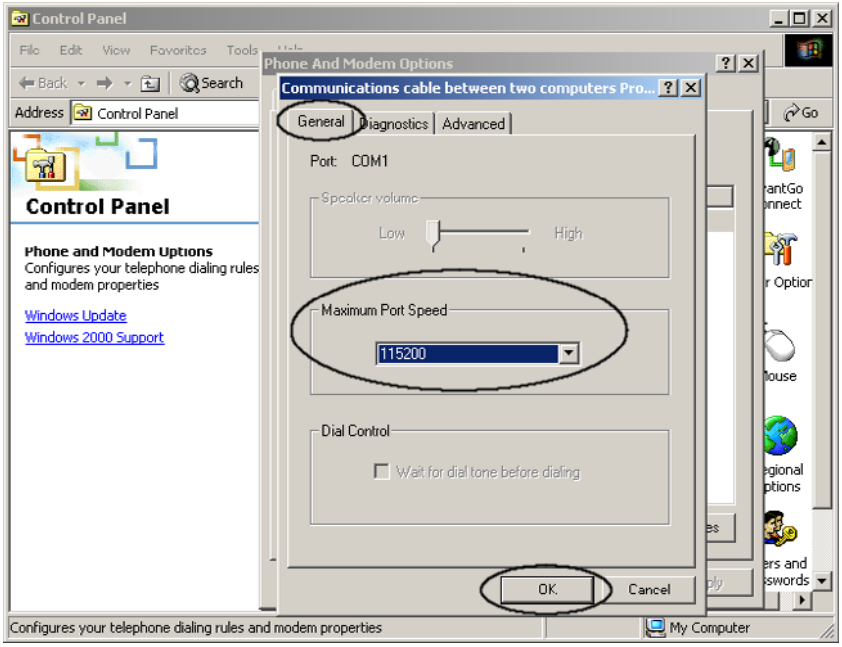
Step	Description
1.	Click Start on the desktop of the PC.
2.	Select **Control Panel/Phone and Modem Options/Modems** to setup a new modem. This window comes up:  Control Panel File Edit View Favorites Tools Back Search Address Control Panel Control Panel Phone and Modem Options Configures your telephone dialing rules and modem properties Windows Update Windows 2000 Support Phone And Modem Options Dialing Rules Modems Advanced The following modems are installed: Modem Attached To Add Remove Properties OK Cancel Apply Configures your telephone dialing rules and modem properties My Computer

Step	Description
3.	Click **Add…**. This window comes up: 
4.	Tick **Don't detect my modem; I will select it from a list.**

Step	Description
5.	Click **Next**. This window comes up: 
6.	Highlight **Communication cable between two computers**.

Step	Description
7.	Click **Next**. This window comes up: 
8.	Select the COM port on which the receiver is connected to. The COM port is the serial port.
9.	Click **Next**.
☞	Windows now takes a while to register the new modem.

Step	Description
10.	Click **Finish** to finish the modem installation procedure. This window below comes up. The newly added modem is displayed in the list of installed modems.  Control Panel File Edit View Favorites Tools Back Search Address Control Panel Control Panel Phone and Modem Options Configures your telephone dialing rules and modem properties Windows Update Windows 2000 Support Phone And Modem Options Dialing Rules Modems Advanced The following modems are installed: Modem Attached To Communications cable between two computers COM1 Add... Remove Properties OK Cancel Apply Configures your telephone dialing rules and modem properties My Computer
11.	Select the newly added modem.

Step	Description
12.	Click **Properties**. This window comes up: 
13.	Select the **General** tab.
14.	Select **115200** as **Maximum Port Speed**.
15.	Click **OK** to return to the window **Phone and Modem Options**.
16.	Click **OK** to close the window **Phone and Modem Options**.

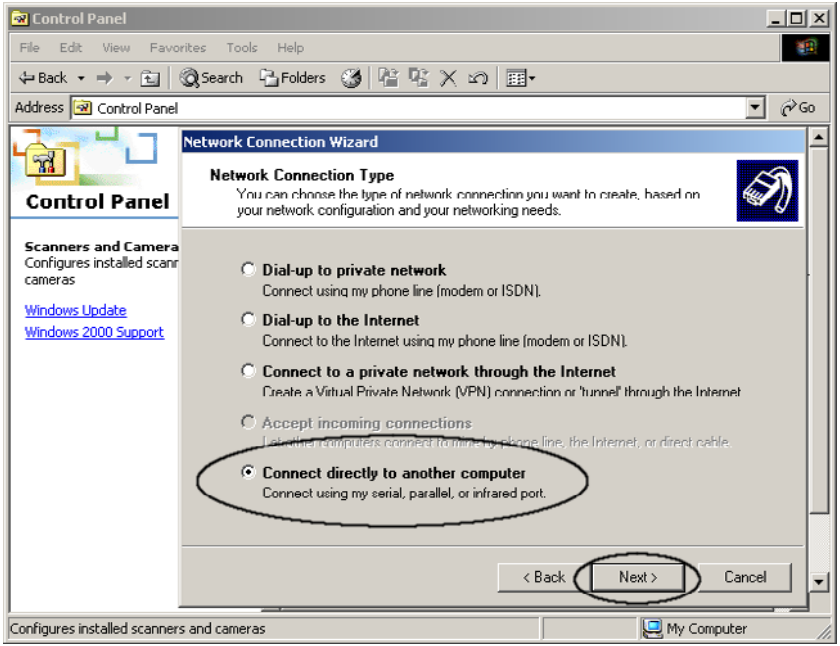
Step	Description
17.	Close the window **Printers and Other Hardware**.
☞	The modem installation procedure is completed.
18.	Continue with the next part. Refer to "Define a PPP network connection step-by-step" below.

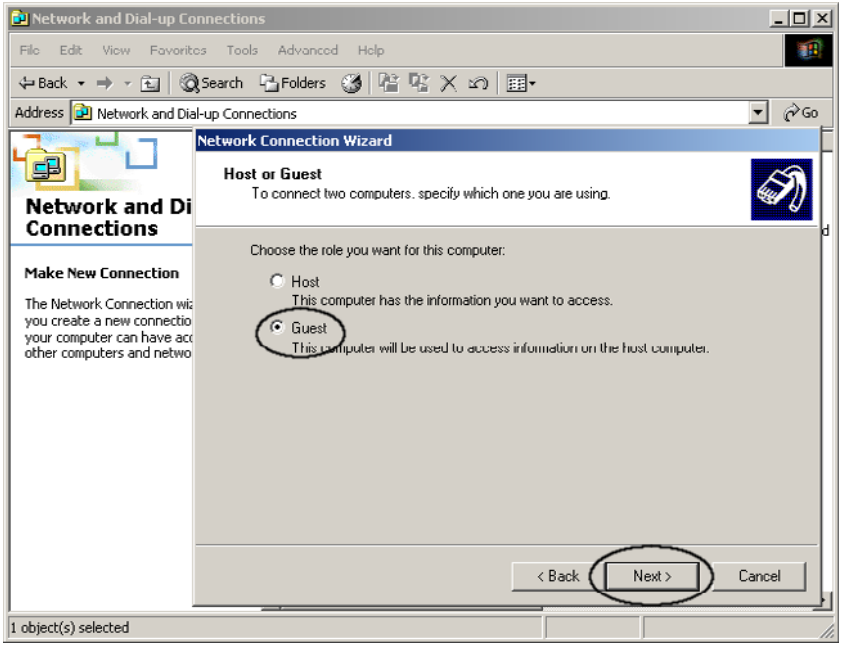
Define a PPP network connection step-by-step

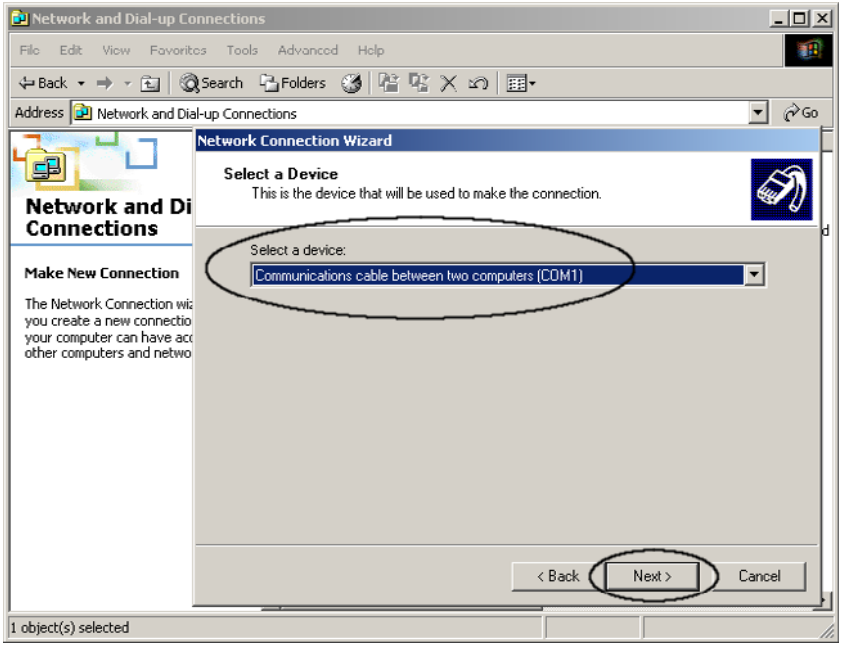
Step	Description
1.	Click Start on the desktop of the PC.

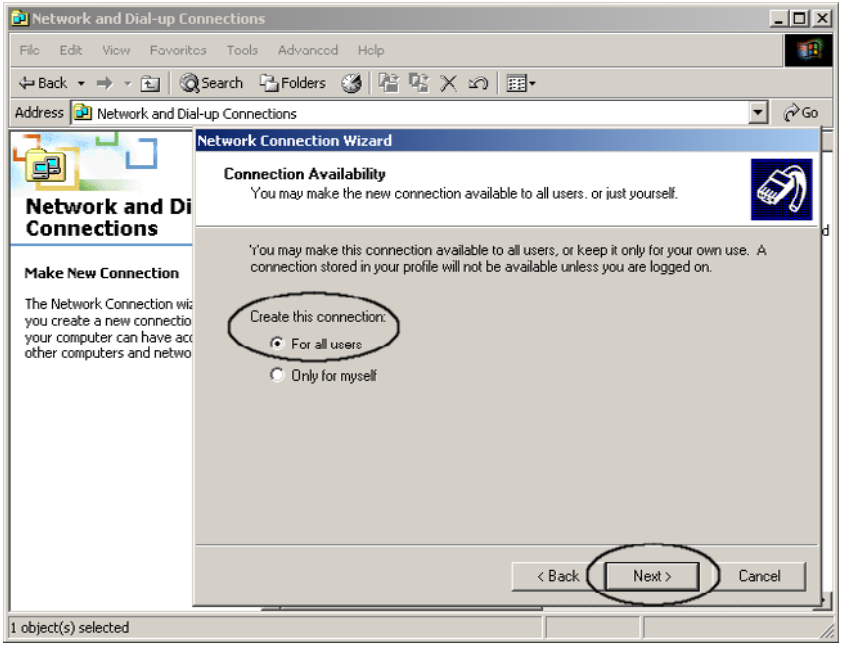
Step	Description
2.	Select **Control Panel/Network and Dial-up Connections/Make New Connection** to setup a new network connection. This window comes up:

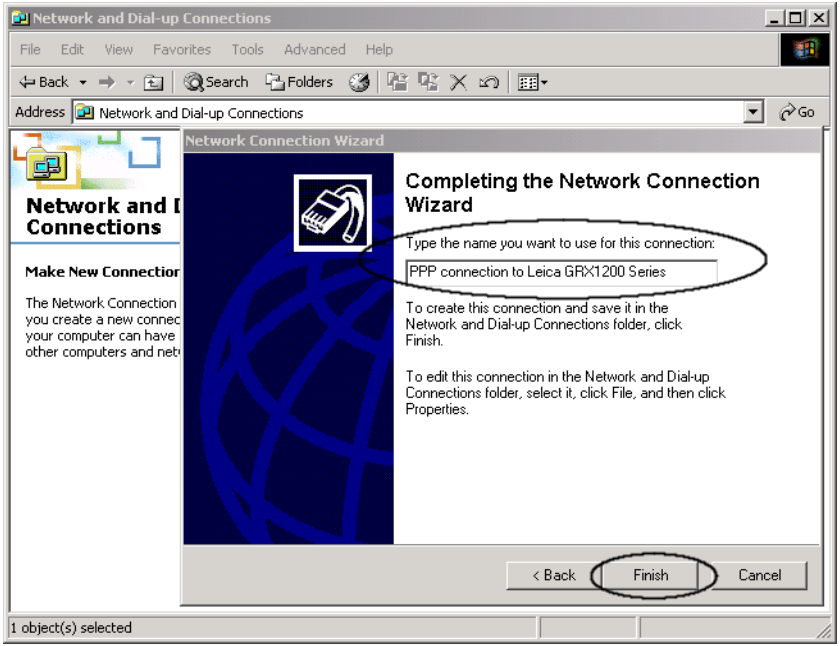
Control Panel
File Edit View Favorites Tools Help
Back Search Folders
Address Control Panel
Go
Control Panel
Scanners and Camera
Configures installed scanr
cameras
Windows Update
Windows 2000 Support
Network Connection Wizard
Welcome to the Network Connection Wizard
Using this wizard you can create a connection to other computers and networks, enabling applications such as e-mail, Web browsing, file sharing, and printing.
To continue, click Next.
< Back
Next >
Cancel
Configures installed scanners and cameras
My Computer

Step	Description
3.	Click **Next**. This window comes up: 
4.	Tick **Connect directly to another computer**.

Step	Description
5.	Click **Next**. This window comes up: 
6.	Tick **Guest**.

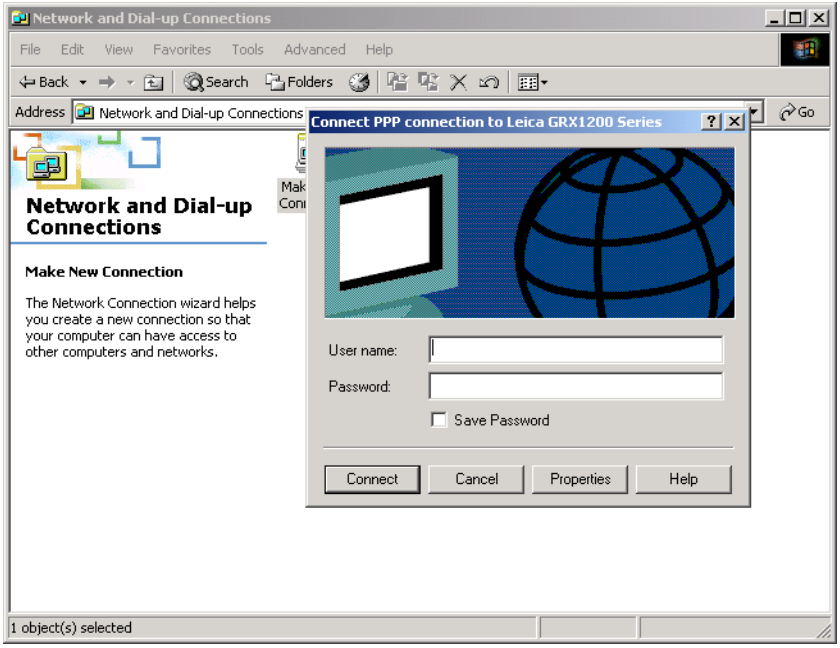
Step	Description
7.	Click **Next**. This window below comes up. The newly added communication cable is displayed in the list of devices. 
8.	Select the newly created communication cable.
9.	Click **Next**.

Step	Description
10.	Click **Finish**. This window comes up: 
11.	Tick **For all users**.

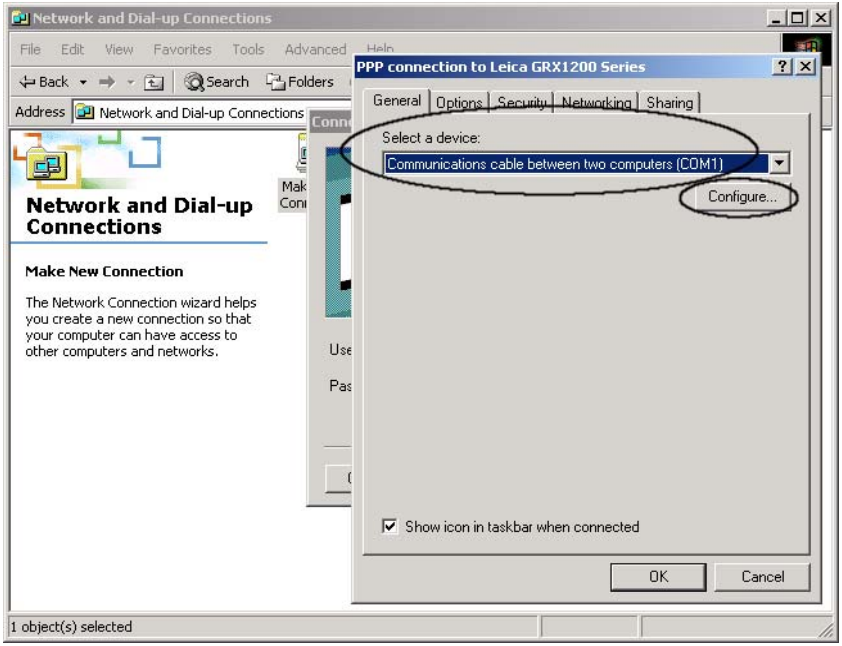
Step	Description
12.	Click **Next**. This window comes up: 
13.	Type in the connection name **PPP connection to Leica GRX1200 Series**.
14.	Click **Finish**.
☞	The PPP network connection is now defined. A connect window **Connect PPP connection to Leica GRX1200 Series** is displayed.

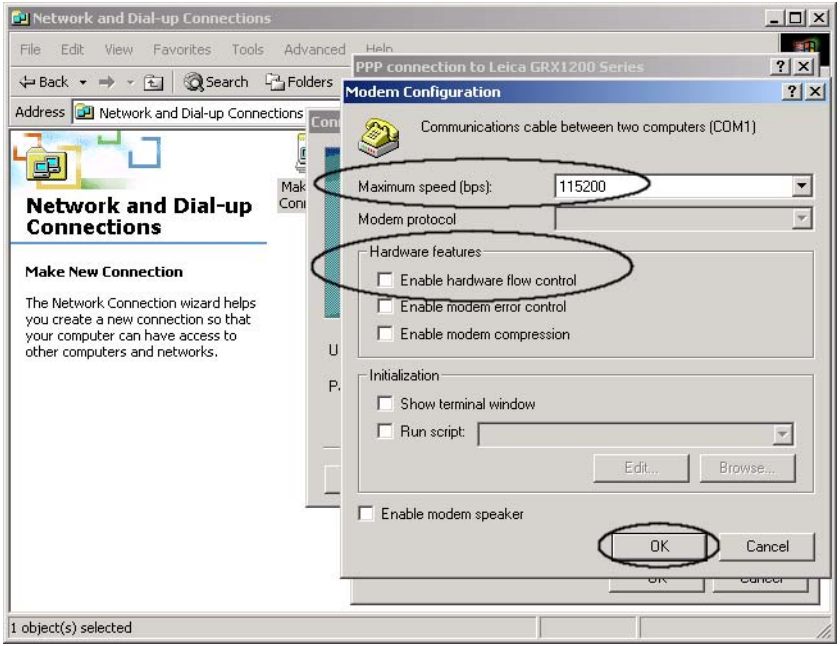
Step	Description
15.	Continue with the next part. Refer to "Establish a PPP connection step-by-step" below.

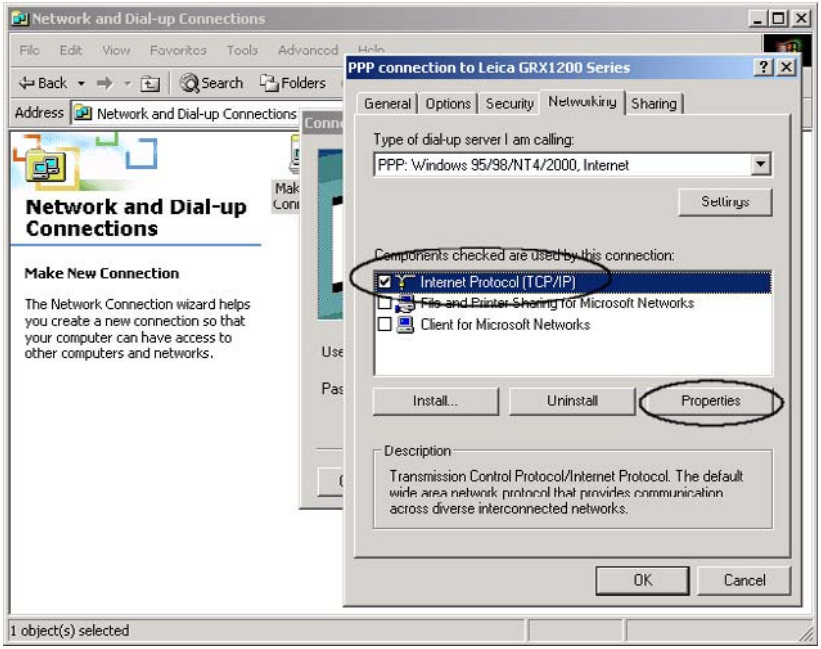
Establish a PPP connection step-by-step

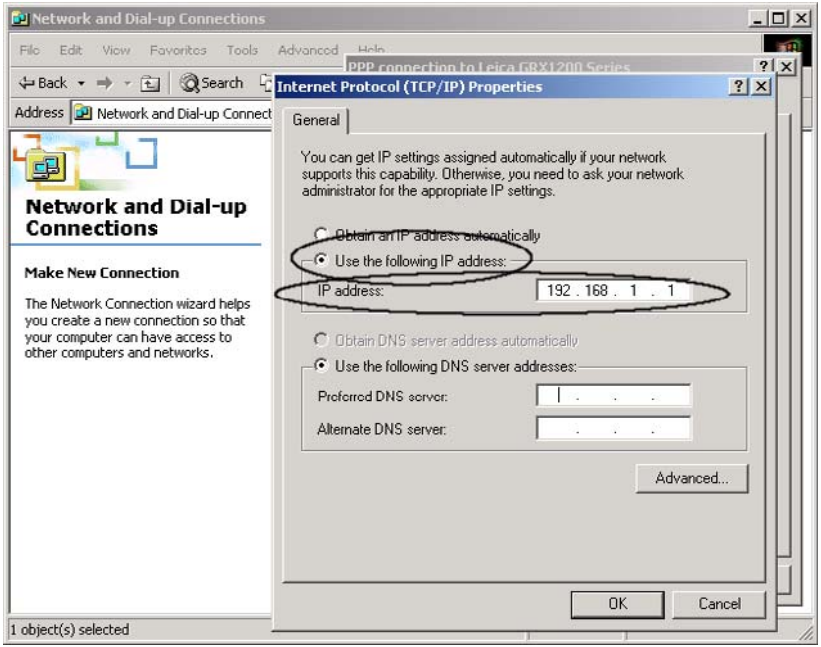
Step	Description
☞	The connect window **Connect PPP connection to Leica GRX1200 Series** is displayed: 

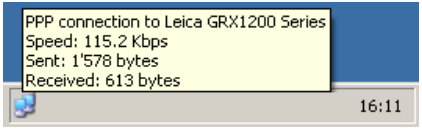
Network and Dial-up Connections
File Edit View Favorites Tools Advanced Help
Back Search Folders
Address Network and Dial-up Connections
Go
Network and Dial-up Connections
Make New Connection
The Network Connection wizard helps you create a new connection so that your computer can have access to other computers and networks.
Connect PPP connection to Leica GRX1200 Series
User name:
Password:
Save Password
Connect
Cancel
Properties
Help
1 object(s) selected

Step	Description
1.	Click **Properties** to set parameters. This window comes up: 
2.	Select the **General** tab.
3.	Select **Communications cable between two computers (COM...)** as device.

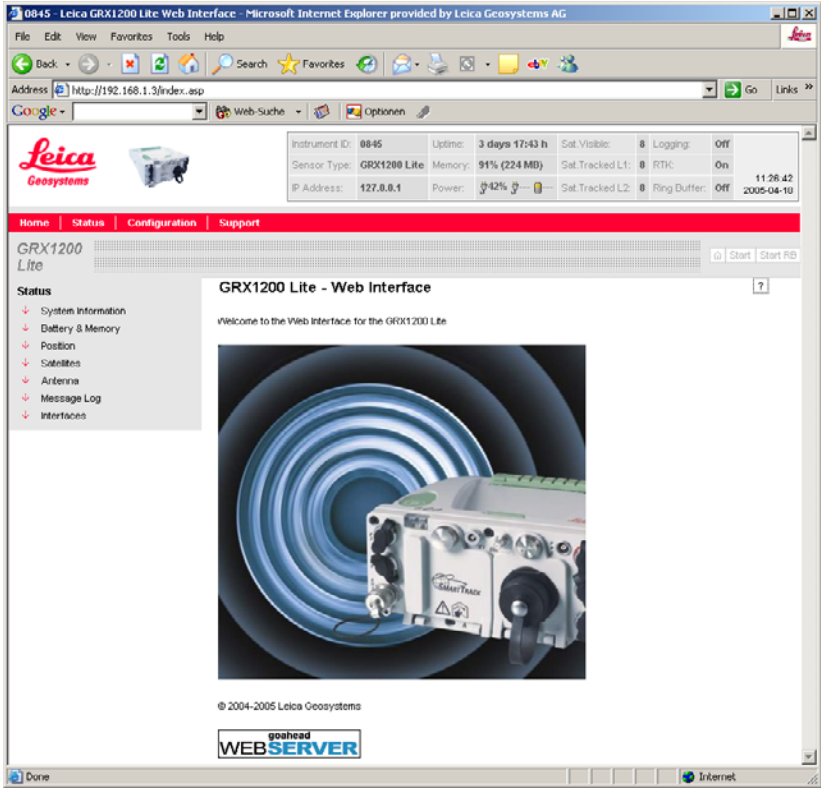
Step	Description
4.	Click **Configure...**. This window comes up: 
5.	Set the **Maximum speed (bps)** to **115200** or to the value configured for port RX in step 14. of "Define a serial line modem device on the PC step-by-step" above.
6.	Untick **Enable hardware flow control**.
7.	Click **OK**.

Step	Description
8.	Select the **Networking** tab. it looks like this: 
9.	Tick **Internet Protocol (TCP/IP)**.

Step	Description
10.	Click **Properties**. This window comes up: 
11.	Tick **Use the following IP address**.
12.	Type in **192.168.1.1** as **IP Address**.

Step	Description
☞	This sets the PC IP address so that it can communicate with the **GRX1200 Series** receiver. This IP address will only be used as long as the connection to the **GRX1200 Series** receiver is established. Once the connection is closed, the standard IP address is automatically used again.
13.	Click **OK** to close the Properties window.
☞	The active window is **Connect PPP connection to Leica GRX1200 Series**.
14.	Leave the input boxes for **User name** and **Password** empty.
15.	Click **Connect** to connect to GRX1200 Classic / GRX1200 Lite.
☞	The connection will now be established.
☞	Look out for a small network icon in the taskbar which is displayed after a successful connection to GRX1200 Classic / GRX1200 Lite. 
16.	Open the web browser.
17.	Type in the receiver default IP address http://192.168.1.3.

Step	Description
☞	The start page of the web interace is displayed after a few seconds.



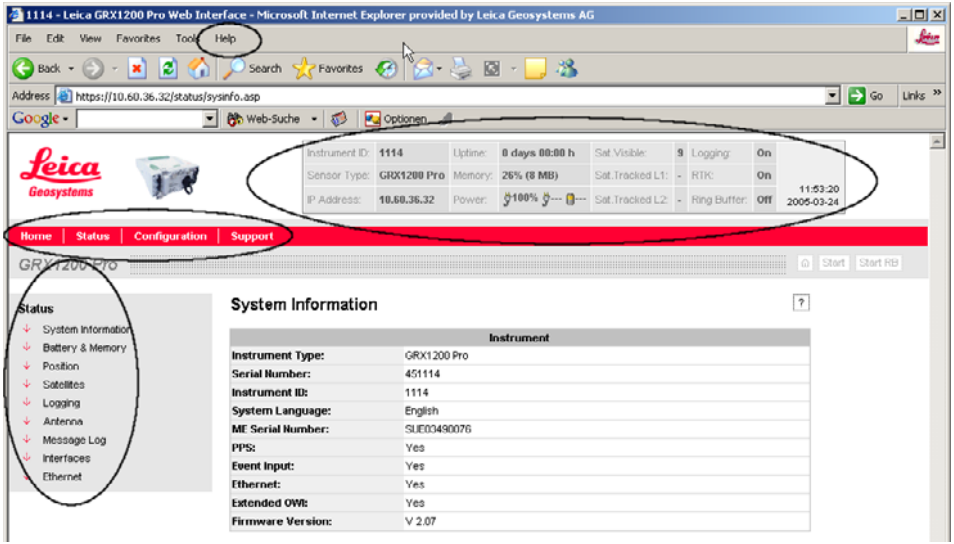
Step	Description
☞	The PPP connection is now established.
☞	It is recommended to temporarily disable other network connections as long as the PPP connection to the receiver is established. Connections to the network may be influenced as long as PPP is active, because thed PC uses a different, fixed IP address during that time.
18.	Continue with "2.3.3 Getting Started with the Web Interface".

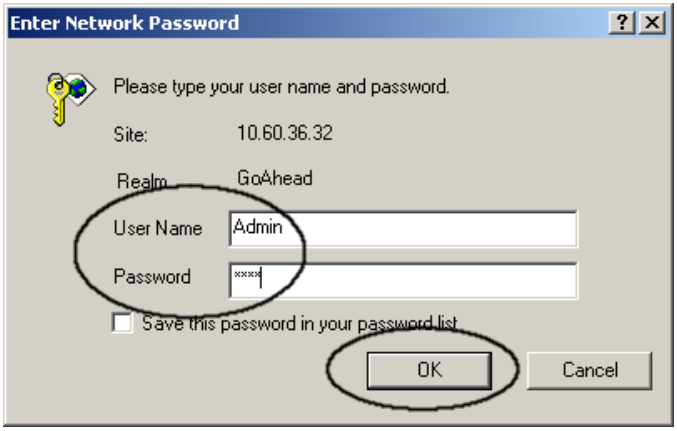
2.3.3 Getting Started with the Web Interface

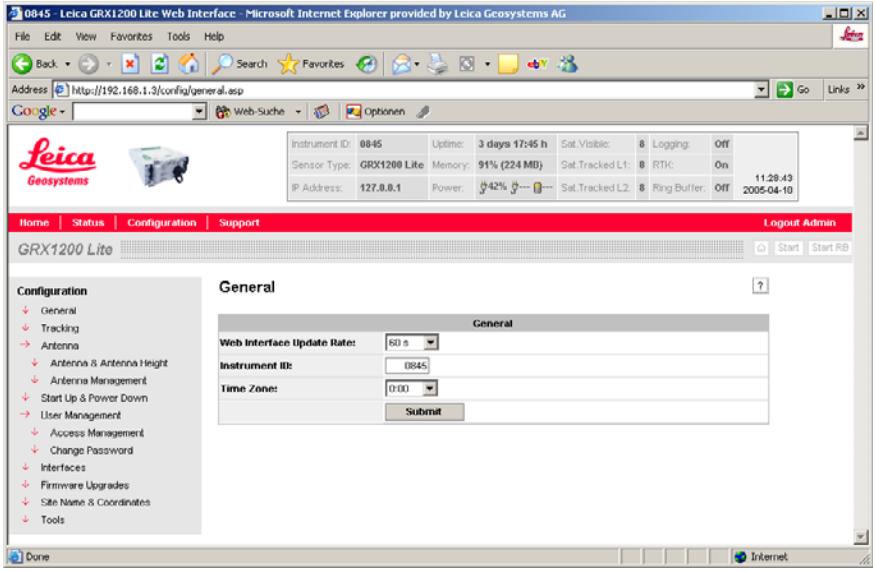
Requirements

The web interface connection must be established. Refer to "2.3.2 Web Interface Connection" for information of the configuration.

Get started with web interface step-by-step

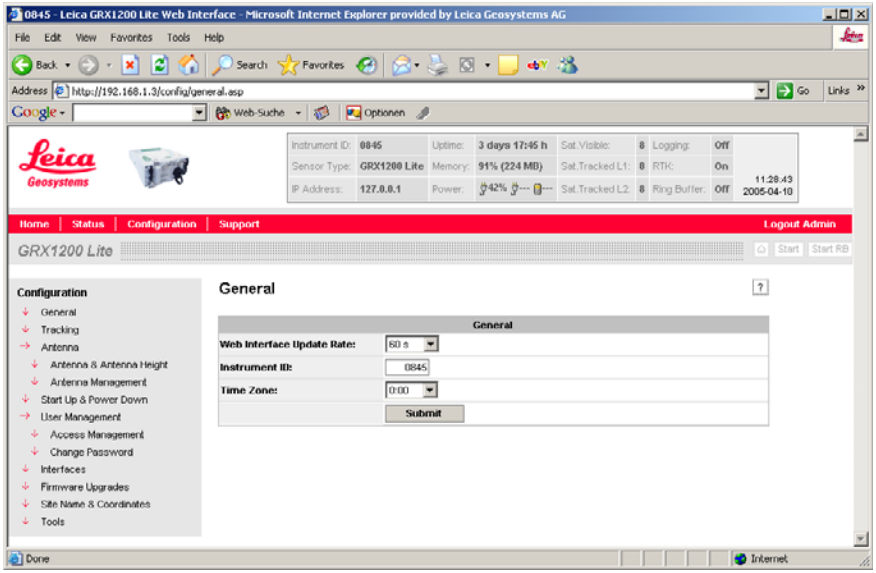
Step	Description
1.	Open the web browser.
☞	The start page of the web interface comes up.  1114 - Leica GRX1200 Pro Web Interface - Microsoft Internet Explorer provided by Leica Geosystems AG File Edit View Favorites Tools Help Address https://10.60.36.32/status/sysinfo.asp Leica Geosystems Instrument ID: 1114 Uptime: 0 days 00:00 h Sat Visible: 9 Logging: On Sensor Type: GRX1200 Pro Memory: 26% (8 MB) Sat.Tracked L1: - RTK: On IP Address: 10.60.36.32 Power: 100% Sat.Tracked L2: - Ring Buffer: Off 11:53:20 2005-03-24 Home Status Configuration Support Status System Information Battery & Memory Position Satellites Logging Antenna Message Log Interfaces Ethernet System Information Instrument Instrument Type: GRX1200 Pro Serial Number: 451114 Instrument ID: 1114 System Language: English ME Serial Number: SUE00490076 PPS: Yes Event Input: Yes Ethernet: Yes Extended OWI: Yes Firmware Version: V 2.07
☞	The status header at the top of the window shows important status information.

Step	Description
☞	The navigation bar below the status header contains the links to the status and configuration pages, and to useful support links.
☞	The navigation tree on the lefthand side provides access to the complete receiver status information.
☞	Click [?] accesses the Online Help. Clicking [?] always opens the help topic of the current page. Clicking [?] on the start page opens the introduction of the Online Help.
2.	Click [Configuration] from the navigation bar. This window come up: 
3.	Type in • **User name**: **Admin** • **Password**: **12345678**

Step	Description
4.	Click **OK**. This window comes up:  0845 - Leica GRX1200 Lite Web Interface - Microsoft Internet Explorer provided by Leica Geosystems AG File Edit View Favorites Tools Help Address http://192.168.1.3/config/general.asp Leica Geosystems Instrument ID: 0845 Uptime: 3 days 17:45 h Sat.Visible: 8 Logging: Off Sensor Type: GRX1200 Lite Memory: 91% (224 MB) Sat.Tracked L1: 8 RTK: On IP Address: 127.0.0.1 Power: 42% Sat.Tracked L2: 8 Ring Buffer: Off 11:28:43 2005-04-10 Home Status Configuration Support Logout Admin GRX1200 Lite Configuration General Tracking Antenna Antenna & Antenna Height Antenna Management Start Up & Power Down User Management Access Management Change Password Interfaces Firmware Upgrades Site Name & Coordinates Tools General General Web Interface Update Rate: 60 s Instrument ID: 0845 Time Zone: 0:00 Submit Done Internet
☞	All configuration settings of a GRX1200 Series receiver can now be accessed.
5.	Take some time to explore the different configuration screens.
6.	Continue with "2.3.4 Configuration and Starting".

2.3.4 Configuration and Starting

Description	GRX1200 Series receivers are delivered with a number of default settings to cover the needs of the majority of users, which keeps configuration time to a minimum. The settings can be adjusted according to all customer needs and applications.
Requirements	The web interface must have been started . Refer to "2.3.3 Getting Started with the Web Interface" for information on how to start the web interface.
Configuration for standard setups step-by-step	For standard setups, it is recommended to run through these basic configuration steps. Refer to the Online Help and the GPS1200 Technical Reference Manual for detailed information on the individual settings.

Step	Description
☞	This step-by-step instruction starts with the last window of the previous chapter.  0845 - Leica GRX1200 Lite Web Interface - Microsoft Internet Explorer provided by Leica Geosystems AG File Edit View Favorites Tools Help Address http://192.168.1.3/config/general.asp Leica Geosystems Instrument ID: 0845 Uptime: 3 days 17:45 h Sat.Visible: 8 Logging: Off Sensor Type: GRX1200 Lite Memory: 91% (224 MB) Sat.Tracked L1: 8 RTK: On IP Address: 127.0.0.1 Power: 42% Sat.Tracked L2: 8 Ring Buffer: Off 11:28:43 2005-04-10 Home Status Configuration Support Logout Admin GRX1200 Lite Configuration General Tracking Antenna Antenna & Antenna Height Antenna Management Start Up & Power Down User Management Access Management Change Password Interfaces Firmware Upgrades Site Name & Coordinates Tools General General Web Interface Update Rate: 60 s Instrument ID: 0845 Time Zone: 0:00 Submit Done Internet
1.	Select **Configuration/General**.
2.	Type in any **Instrument ID**.
☞	Click **Configuration/Submit** always before leaving a screen.
☞	If you are interested in raw data logging, change to the **Logging** page. Configure the settings for **Primary Logging**.
3.	Select **Configuration/Antenna**.

Step	Description
4.	Select the **Antenna**.
5.	Select **Configuration/Antenna Height**.
6.	Type in the **Antenna Height**.
☞	If you want to broadcast real-time corrections, set it up in the **Configuration/Interfaces**.
7.	Select **Configuration/Site Name & Coordinates**.
8.	Type in **Site Name** and the **coordinates** of the site.
9.	Select **Configuration/Access Management**.
10.	Delete the default user **Admin** and create a new administrator user, defining **user name** and **password** of free choice. This isrecommended for security reasons.
11.	Click **Start** in the navigation bar to start the receiver logging and/or real-time corrections.
☞	The status header shows **Logging: ON** and/or **RTK: ON**, depending on the configuration.
12.	Click Logout on the navigation bar once the receiver is up and running.
13.	Click ✕ to close the web interface.

Super Administrator

The Super Administrator account

- can be used to log in and to create a new account in case the existing password got lost or the Administrator user has accidently been removed.
- has the **User name: PUK**.

- uses a **PUK code** as **password**.
  For receivers delivered with firmware version 2.10 or higher, the PUK code comes with the receiver.
  For receivers delivered with firmware versions lower than v2.10, contact a Leica representative to obtain a PUK code.
- cannot be edited and is not part of the Access Management.
  The Access Management is a component of the web interface to manage user accounts.

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Leica Geosystems AG, Heerbrugg, Switzerland, has been certified as being equipped with a quality system which meets the International Standards of Quality Management and Quality Systems (ISO standard 9001) and Environmental Management Systems (ISO standard 14001).

Total Quality Management - Our commitment to total customer satisfaction.

Ask your local Leica Geosystems dealer for more information about our TQM program.

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